

## Water Use Efficiency Annual Performance Report - 2015

WS Name: YAKIMA WATER DIVISION, CITY OF

Water System ID# : 99150

WS County: YAKIMA

Report submitted by: *David Brown*

### Meter Installation Information:

Estimate the percentage of metered connections: *100%*

If not fully metered - Current status of meter installation:

### Production, Authorized Consumption, and Distribution System Leakage Information:

12-Month WUE Reporting Period: *01/01/2015* To *12/31/2015*

Incomplete or missing data for the year? *No*

If yes, explain:

### Distribution System Leakage Summary:

Total Water Produced and Purchased (TP) – Annual Volume	3,799,399,869 gallons
Authorized Consumption (AC) – Annual Volume	3,179,958,352 gallons
Distribution System Leakage – Annual Volume TP – AC	619,441,517 gallons
Distribution System Leakage – Percent DSL = $[(TP - AC) / TP] \times 100$	16.3 %
3-year annual average	15.4 %

### Goal-Setting Information:

Date of Most Recent Public Forum: *07/05/2011* Has goal been changed since last performance report? *No*

Note: Customer goal must be re-established every 6 years through a public process

### WUE Goals:

Customer Goal (Demand Side):

*Maintain the current residential per capita use of 74.9 through July 2017 (average water use per person per day). As this is a very low per person use no additional water savings is expected. The city has a separate irrigation supply so reducing this very low per capita rate will be very difficult.*

### Describe Progress in Reaching Goals:

Customer (Demand Side) Goal Progress:

Conservation Rate Structures are already in place. The Rate Structure has gone from 5 declining blocks to one block in 2009. A Rate Study was completed 2012 along with an update in July 2013 where additional conservation rates were analyzed. Utility bill showing consumption history for both Residential and Industrial/Commercial implemented with the new billing system April 2010. Customers will have access to their billing records including water use through an internet portal beginning in March 2015. Education measures identified in the 2011 Water System Plan update are ongoing. The current residential per capita use in the 2011 Water System Plan the average per capita use was 74.9 gallons per capita per day. The 2011 per capita use has remained approximately the same. The per person use is very low and we have determined further reduction is per person use is not financially feasible at this time. The per person use will be analyzed again in the 2017 Water System Plan Update. Automated meter reading system is 99.5% installed and will be complete by June 2016, which replaced all meters. This automated system will allow water use, consumption and DSL to be calculated every week. We have been conducting audits to determine proper meter size and have replaced over 200 meters with smaller appropriate sized meters. We have an intensive meter calibration program for all meters over 1 1/2 inch. Public education, water use graph and the economy have resulted in lower total use. Reduce Distribution System Loss to 10% or less by January 2017. There was good progress last two years, due mostly to improved meter reading accuracy; while loss increased this year we attribute that to not recording all water sales. A new utility billing system will be implemented in July 2016 making it possible better account for use/consumption.

#### **Additional Information Regarding Supply and Demand Side WUE Efforts**

Include any other information that describes how you and your customers use water efficiently:

Leak detection surveys are conducted every few years. In 2008 & 2009, some leakage was found and eliminated. A leak survey was conducted on the 8 mile transmission main in May 2011 and no leaks were discovered. We believe the actual DSL is below 10% already. Because of numerous errors identified in current meter reading, such as miss reads and read estimates, it is assumed that well over half of the calculated DSL can be attributed to these errors, however a significant improvement has occurred. Additional steps implemented to reduce DSL include: Two metered fill stations for use by street sweepers and for other city uses has been installed and several more are in planning, this will allow more accurate tracking of water use. Implemented a program to more accurately account for water used for other uses such as fire fighting and training, street sweepers and other water tanker type trucks. In the 2012 Rate Study the rate charged for uses such as for street sweeping was analyzed. The City has adopted the latest Uniform Building Codes which mandate low use plumbing fixtures.

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